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## ACUTA eNews February 1991, Vol. 20, No. 2

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# ACUTA

Inside this Issue . . .

- ACUTA gains new tax status, 2
- Stopping a runaway dialer, 4
- Just what is an engineer? 5
- FCC ruling awaited, 7
- Party Line, 8
- In-house accounting, 10

# NEWS

**Association of College & University Telecommunications Administrators Inc.**

THE VOICE OF TELECOMMUNICATIONS IN HIGHER EDUCATION

FEBRUARY 1991

## Voice messaging can increase productivity

Voice messaging and voice response applications can increase the productivity of faculty, staff and students, Donald Van Doren told more than 200 representatives of college registrars and telecommunications departments at ACUTA's Winter Seminar in Ft. Lauderdale, Florida, Jan. 13-16.

Van Doren, of Vanguard Communications in Morris Plains, NJ, covered a wide variety of voice

### Ft. Lauderdale Seminar Review

processing applications while Dino Pezzutti, Director of Telecommunications at The Ohio State University, explained how touch-tone technology had revo-

lutionized the student registration process at his campus.

Cindy Adams, Processing Systems Planner at the University of Illinois, and Glen Whitmer, Assistant Director of User Services, presented a case study of the successful application of voice processing in the language

*(Please turn to page 4)*

## No one plans to fail, but some fail to plan

**By John Melckle**  
Yale University  
Northeast Region

"Those with the plan win." That's the admonition of a former boss that Mike Grunder, Director of Telecommunications, often quotes to his staff here at Yale. More often than not, when we've heeded that advice our department has been able to "get the job done" and keep a sense of institutional perspective.

The telecommunications department that is itself a large organization within an institution can be distracted by its own needs and considerations and lose sight of institutional goals.

A manager, even in a smaller department of a college or university, who has too narrow a viewpoint, can fail to tailor a project so that it complements the fabric that is an institution's purpose. *(Please turn to page 9)*

*A record equaling number of attendees for a seminar, 205, were on hand for the Winter Seminar in Ft. Lauderdale, FL. The number was a record for a winter seminar. Twenty-five exhibitors, including five first-time exhibitors, also were on hand.*



## Hawaii hotel deposits due by Feb. 19

ACUTA members planning to attend the Spring Seminar, April 5-9, in Honolulu are reminded that hotel room deposits should be received by the Hyatt Regency Waikiki no later than Feb. 19.

Room requests after the cut-off date will be confirmed on a space-available basis only. City and mountain view rooms are \$99 per night, while ocean view rooms are \$145 per night. (All rooms are subject to Hawaii state taxes of 9.43 percent.)

These special rates are available up to three days prior and three days after the seminar dates. Requests for early and/or late arrivals will be fulfilled on a space-available basis only.

Deposit check, equal to one night's lodging, should be mailed to the Hyatt Regency Waikiki at 2424 Kalakaua Ave, Honolulu, HI 98615-3289.

Deposits should be sent along with the form that accompanied *(Please turn to page 11)*



*The ACUTA Vendor Liaison Committee held its second meeting at the Winter Seminar in Ft. Lauderdale. From left are Linda Darner, Octel; Dave Stanley, Anixter; Michael Katz, Sunbelt Business Computers; Bob Capps, VMX; Jack Chapman, The Fishel Co., and Paula Loendorf, ACUTA Executive Vice President.*

## More favorable tax-exempt status is approved for ACUTA by the IRS

The U.S. Internal Revenue Service has granted ACUTA a new, more favorable tax-exempt status – 501(c)(3) as an educational organization.

For the association's first 19 years, the tax exempt classification was 501(c)(6), that of a non-profit professional organization whose members are individuals.

When ACUTA was first organ-

ized, in 1971, one of its primary objectives was enhancing the professional status of the college and university telecommunications manager, explains Executive Director Del Combs. "During the past 19 years, ACUTA has had great success in achieving that original goal," he continues. "Today, telecommunications networks are more important

than ever to the higher educational enterprise. And college telecommunications managers are accorded the professional level of respect, knowledge and integrity they deserve.

"ACUTA's current emphasis has shifted (as our revised bylaws and articles of incorporation state) to providing continuing education to professionals in a field of rapidly changing technologies and applications. Our membership can more properly be described as institutions of higher learning, which are represented by a variety of professional telecommunications personnel.

There are several advantages to having the 501(c)(3) tax exempt status, Combs points out. "First, it will reduce the cost of our bulk mail postage by 50 percent. This is all the more important since postal rates have gone up as of Feb. 3. Secondly, many retail purchases by the ACUTA office will no longer be subject to Kentucky sales tax, which increased last year from five to six percent. And, ACUTA's professional staff many enjoy a more flexible employee benefits program, similar to what you enjoy as an employee of an educational institution.

The Lexington office also will file for exemption from sales taxes in state where seminars and conferences are scheduled. Exemptions from these taxes could save ACUTA up to \$10,000 annually.

"Finally, the 501(c)(3) status will mean a more favorable tax deduction to corporations and foundations whose donations may help fund our educational programs. At present, such contributions are only a 'business expense' for industry," Combs explains.

ACUTA President Bill Orrick has had a number of committees at work exploring a variety of new educational services and programs that the association can afford with its new fiscal abilities or fund by with donations, Combs adds. ♪

### Association of College and University Telecommunications Administrators – ACUTA NEWS, Volume 20, No. 2

PRESIDENT: F. William Orrick, Washington University in St. Louis

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VICE PRESIDENT: Coleman Burton, University of Missouri

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## MESSAGE FROM THE PRESIDENT

F. William Orrick,  
Washington University  
in St. Louis

Hello from the Bahia Mar!

Like many of the morning news shows done on location, my message this month is being composed during our Winter Seminar in Ft. Lauderdale. As advertised, we were full to the rafters. Final count appears to be 205 fully registered attendees for this timely, well-presented, well-received seminar on Voice Messaging/Voice Response/Touch-tone Registration.

### Voice your views

Add your voice to "The Voice of Telecommunications in Higher Education." ACUTA members may use the pages of the ACUTA News to comment on issues facing the association or college telecommunications in general. Letters to the editor, as well as member-written items, are encouraged. You also may submit questions or state problems for publication so that reader may suggest answers. Write to Bill Robinson, ACUTA Publications Editor, Suite 2420, Lexington Financial Center, Lexington, KY, 40507-1739.

Don Van Doren, recognized as a leading expert in the field did an outstanding job of bringing the issues to the table and generating vast interest, questions and discussion of the subject.

This seminar was supported by 25 exhibitors, 13 of which were vendors featuring various types of voice services and products. Five vendors were exhibiting for the first time.

We are appreciative of all exhibitors and sponsors and extend a special welcome to the new folks. We hope to see you again, soon and often. The information you provide is most helpful and valuable.

To the members who have been asking ACUTA to present a program on Voice Processing, we say "thank you" for your support, i.e., turning out in such excellent numbers for this event.

The response to this seminar shows that we need to keep our ears tuned to the market and our members' interests. We will continue to do our best to serve your needs.

### Please Complete Survey

Further to that end, if you have not filled out and returned the ACUTA membership survey form, please do so. We are compiling results, and the preferences expressed for future seminar and conference topics will be of great use to the Program Committee as it plans future events.

We had approximately 50

percent of the survey forms returned by mid January, but more is better.

### Looking Ahead to Hawaii

As we wind down from Ft. Lauderdale, we should begin setting our sites on Hawaii. You should have received your registration packet in early January. A very early hotel reservation cutoff was the reason for our sending this out so soon.

### Room Deposit Deadline Feb. 19

Remember, in order to be guaranteed of reserving a room at the amazingly low rate of \$99 a night, the hotel must receive a one night's deposit by Feb. 19. The hotel has indicated that it will work with us, in accommodating those members who are running down to the wire getting approval. Give them a call and let them know that the "check is in the mail." They won't hold rooms indefinitely, however. So, speed your response as soon as possible.

### Aloha Attire, Requested

The dress code for our meeting in Hawaii will be altered somewhat. In consideration of the location, it will be tropical and casual! Please, no coats and ties or other business attire. This applies to all attendees, exhibitors and sponsors.

### The Program

The program, Strategic Applications of Telecommunications in Higher Education, is coming together quickly. Presented by Jerry McDowell of Vanguard Communications and supported by case studies from ACUTA member institutions, we will explore the world of the future that will exist on our campuses.

I am looking forward to seeing you at the Hyatt Regency on Waikiki. Aloha! ☺

# Voice processing

(Continued from page 1)

laboratory and graduate school office at their Urbana-Champaign campus.

On Jan. 15 during the seminar, representatives of AT&T announced, simultaneously with their Bridgeport, N.J. offices, a series of enhancements to Bell Laboratories' interactive voice response system that make it easier to use.

"Voice mail boxes" can be used to reply to the messages they record, Van Doren pointed out. But they also can send one message to numerous other "boxes." For example, a professor can record and send an assignment or announcement to every student in a class.

If both students and faculty have voice mail boxes available, they can avoid the frustrating game of "telephone tag" that results from the irregular schedules that characterize the daily lives of both segments of a college community.

"Many exchanges of information can be achieved without both parties being in contact simultaneously," he added. Professors have a staggered schedule of classes and office hours as well as research and the inevitable committee responsibilities. Students also have a staggered class schedule and often a job as well as extracurricular activities.

Voice messaging not only facilitates contact between students and teachers, it can also reduce interruptions for faculty and department secretar-

ies, Van Doren noted. Many routine interactions that generally occur over the telephone can be handled more efficiently by variations of voice messaging, he added.

For instance, many of the calls to a college admissions office are requests for catalogs and application forms. These can be directed by an automated attendant to "voice mail box forms" in which callers leave their names and addresses.

Out-of-class communication between faculty and students has become more difficult as the number of part-time and non-traditional students has increased. "Voice mail can strengthen the bonds of campus community that are increasingly threatened by the forces of fragmentation," Van Doren asserted. "Students' parents also are potential customers for voice mail boxes that can help them keep in touch," he added.

At Columbia College in Columbia, Mo., only 500 of the 2,800 students are campus residents. And only 800 of the total are day students. The remainder attend evening classes. A number of evening faculty are part time and have no offices on campus.

"Facilitating communication between faculty and students at Columbia has been a challenge," says David Olson, Information Systems Director for Hardware and Telecommunications, at the former women's college that was founded as a "sister" institution of the University of Missouri.

Olson attended the ACUTA seminar to explore applications for the voice mail package that his

(Please continue on page 6)

## Can attack of the dreaded automatic dialer be stopped?

**By Marvin Peck**

Emory University  
Southeast Region

Imagine you are responsible for telecommunications at a university with more than 10,000 lines. Now imagine that a marketing firm has programmed their auto dialing computer to begin calling every one of your 10,000.

Can you imagine the number of irate calls you are going to receive from departments throughout the university demanding that you do something to stop this barrage of calls?

This scenario was not an idle fantasy but a reality recently at Emory University in Atlanta, GA. Not only were the calls disrupting work and lowering productivity, they were also placing useless

messages in our voice mail system, disturbing doctors and medical staff throughout the medical center and aggravating patients in the hospital, including those in intensive care units.

Fortunately, we were able to do something. Through some telecommunications sleuthing, we were able to get in touch with the firm that was making the calls. The message from the mechanical caller asked that they be called back at a 900 number.

We determined which long distance vendor owned the 900 number. By a stroke of luck, it was our long distance vendor. We explained the situation to them, and they called the owner of the 900 number. To the owner's credit, they called us promptly

and re-programmed the dialer to stop calling our numbers.

Perhaps the operators of auto dialing computers could borrow an idea from their counterparts in the direct mail advertising business. The mail advertisers accept the names and addresses of those who do not wish to receive their mailings. Why not a telecommunications equivalent for businesses who do not wish to receive these calls?

The Georgia Public Service Commission has already restricted computer generated calls to certain hours of the day. If the companies that utilized computer generated calls don't begin policing themselves more closely, they may find themselves yet further restricted. Perhaps out of business. ♪



# New Jersey's legal definition of 'engineer' is unclear

Legislation in New Jersey has blurred the line between engineering and telecommunications, according to Phone+ magazine. Some consultants fear it may be illegal for anyone except a licensed engineer to handle telecommunications projects in the state, the magazine said.

While the law is new and yet to be tried on this point, some view it as an opportunity to take business away from telecommunications professionals. At the very least, it has prompted renewed interest in certification procedures for telecom consultants.

A set of three laws, passed by the New Jersey legislature in May, define what work should be done by architects and engineers. While these laws clarify the contrast between the professional jurisdiction of architects and engineers, they do not draw any distinctions between an engineer and a telecommunications professional.

One act sets up a panel to resolve disputes between engineers and architects. Another defines architecture and the third defines professional engineering.

Under the new laws, the domain of engineering also includes telecommunications. And only an "engineer" may practice "professional engineering."

Precisely what these laws mean for telecommunications professionals appears to be unclear, even to the New Jersey officials who must enforce the new regulations.

No complaints have been filed under the new laws in regard to telecommunications. But New Jersey architects have used portions of the legislation to file 100 cease and desist orders against firms they claim are practicing architecture without a license.

According to W.O. Van Blarcom, Executive Director of New Jersey's Board of Professional Engineers, additional regulations

may be needed to clarify the definition of "engineering."


Is the law intended to affect people who handle office telephone systems? "I don't know," Van Blarcom replied.

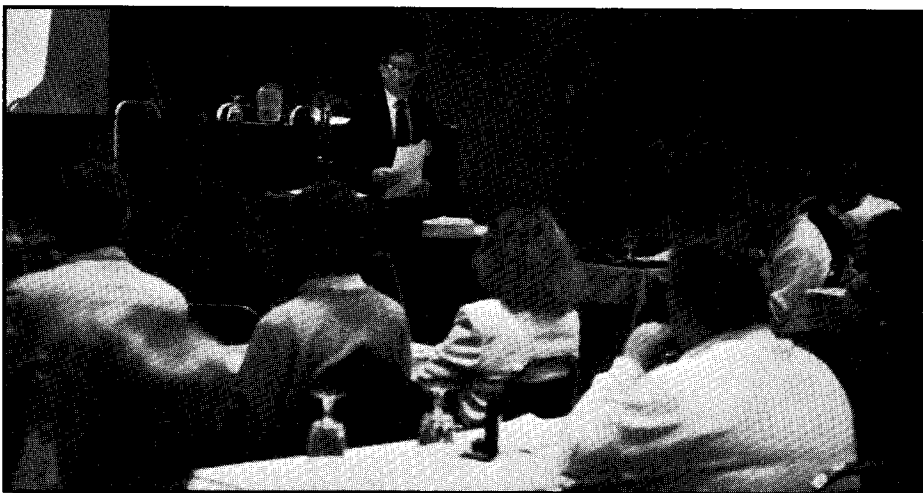
"The lack of definition in the U.S. telecommunications industry has been a long-standing problem," Phone+ pointed out, especially the use of such terms as "traffic engineering" and "telecommunications engineer."

Robert B. Stricklin Jr, Executive Director of the National Council of Engineering Examiners, noted that "engineer" is a term protected by law in all of the

states. "To call yourself an engineer, you must be certified by a state agency," he said.

"Telecommunications consultants talk about traffic engineering and equipment engineering," he added, "and I'm not sure what they mean. But if they want to call themselves engineers, they must be engineers, especially if they are going to market themselves to the public."

New Jersey officials report that other states have expressed interest in the new laws and several state regulatory boards have requested copies of the legislation. 



*Dino Pezzutti, Director of Telecommunications at The Ohio State University explained OSU's telephone registration system at the Winter Seminar.*

## ACUTA Calendar

• **Spring Seminar** •  
Honolulu, Hawaii  
April 5-9, 1991

HOTEL: Hyatt Regency Waikiki

TOPIC: Strategic Telecom Applications in Higher Education

• **20th Annual Conference** •  
St. Louis, MO.  
July 7-11, 1991

HOTEL: Adams Mark Hotel

TOPIC: Management, Regulatory Issues, Professional Growth, Voice, Data and Video

• **Fall Seminar** •  
Denver, CO.  
Sept. 15-18, 1991

HOTEL: Hyatt Denver

TOPIC: Student Services

• **Winter Seminar** •  
Tucson, AZ.  
Jan. 9-11, 1992

HOTEL: The Westin La Paloma

TOPIC: To be announced

## Voice processing

(Continued from page 4)

college acquired when it purchased new telephone switching equipment late last year.

For most of the 54,000 students enrolled at The Ohio State University in Columbus, registration for classes each term involves only a three-minute phone call.

Thanks to an innovative application of telephone technology, students may "dial in" to a computer linked to the university registrar's office and enter course selections via the push buttons of their telephones.

"This can be done from anywhere there is touch-tone phone service, anytime the registrar's computer is 'on line' to receive phone calls," explained Pezzutti, who is responsible for telecommunications at the mammoth OSU campus.

While campus telecommunications and data processing departments are called on to provide support for telephone registration, the university registrar must take the lead and be in charge of tailoring the features of such a system to the specific needs of an institution, Pezzutti pointed out.

Before the implementation of telephone registration, OSU students had to negotiate what were often long lines that queued up at the doorways to the registrar's offices. Now, unless they hit a snag in the process, students need not leave their homes or residence halls to sign up for the upcoming term's classes.

Telephone registration also may be done over long distance, if the student pays for the toll call.

Pezzutti listed several advantages the increasingly popular technique offers institutions. Telephone registration eliminates the need for seasonal staff or overtime pay to conduct the tedious process of registration.

"Our system is a money saver for the administration and a time saver for students," he added.



**Steve Smittle, Director of Data Processing at Central Florida Community College, who helped develop the system on his campus, explains the IBM/ROLM telephone registration exhibit to Liz Posalski, Telephone Service Consultant at California Polytechnic State University.**

(A report on the telephone registration system at Ohio State was carried in the October 1989 issue of the *ACUTA News*.)

At the University of Illinois, another expansive midwestern campus, an automated attendant directs callers to assignment "bill boards" of an oral lesson. The digital technology provided by the telecommunications department, when it took responsibility for this service, is much more reliable than the reel to reel tape that formerly was used.

### Telephone registration can save time for the students, money for the university.

A larger pool of incoming lines is available and a multiple number of students can use a line at one time. Calls can be restricted to certain time of day and day of week access. Limiting student calls to "after office hours" prevents competition with administrative use.


An automated attendant on graduate school office's line now frees the receptionist to work productively on problem cases. Previously she spent her entire day screening and forwarding calls. And callers are no longer frus-

trated by incessant busy signals.

The seminar also was site for exhibits by 25 vendors of telecommunications products and services, including telephone registration packages and voice messaging systems.

Bell Labs' Conversant Voice Information System, unveiled at the seminar, "is the first designed to let customers add new vocabularies and algorithms easily, so they can take advantage of improvements in the technology as they become available," the company said. A new speech recognition feature lets callers furnish information verbally, just as if they were talking to another person, instead of tapping in their responses on the touch-tone pads of their telephones.

ACUTA's purpose is to offer training in the latest applications of voice and data technology to higher education," explained ACUTA Executive Director Del Combs.

"Voice processing is becoming an increasingly popular tool for colleges and universities to increase their productivity," added ACUTA President F. William Orrick, Director of Communication Services at Washington University in St. Louis. "This was demonstrated by the attendance at this seminar by 205 higher education administrators." 

# FCC yet to rule if colleges are aggregators

**By Bill Robinson**  
*ACUTA Publications Editor*

Confusion persists as to how the Telephone Operator Consumer Services Improvement Act of 1990 should apply to colleges and universities who rent telephones to dormitory residents.

The stated purpose of the act [Public Law No. 101-435, 104 Statute 986 (1990)] is to "assure fairness for consumers and service providers alike."

The law was enacted, in part, because the Congress found that "the mere existence of a variety of service providers" does not make the marketplace "competitive." The intended benefits to consumers of competition resulting from the divestiture of AT&T can be realized, the law points out, "only when consumers are able to make informed choices from among those service providers."

Consumers often have no choice in selecting a provider of operator services, Congress

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## Competition exists only when consumers can make informed choices.

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found, because "attempts to reach their preferred long distance carrier by using a telephone billing card, credit card, or prearranged access code number are blocked."

From January 1988 to February 1990, the FCC received more than 4,000 complaints from consumers about operator services.

To enforce the provision of the new law, the FCC has proposed a number of requirements for both aggregators and operator service providers.

An operator service provider must:

- Identify itself, audibly and distinctly, to the consumer at the

beginning of each telephone call and before the consumer incurs any charge for the call;

- Permit the consumer to terminate the telephone call at no charge before the call is connected;

- Disclose immediately to the consumer, upon request and at no charge to the consumer, a quote of its rates or charges for the call, the methods by which such rates or charges will be collected and the methods by which complaints concerning such rates, charges or collection practices will be resolved;

- Not bill for unanswered calls in areas where equal access is available;

- Not knowingly bill for unanswered calls where equal access is not available, and

- Not engage in "call splashing," unless the consumer requests transfer to another provider and is informed if the charges may not reflect the rates for the actual location and consents to be transferred;

Furthermore, operator service providers are prohibited from making payments to aggregators who block access by means of 950 or 800 numbers to common carriers.

Aggregators are required to post - on or near the telephone instrument - in plain view of consumers:

- The name, address and toll-free number of the provider of operator services

- A disclosure that rates for all operator-assisted calls are available on request, and that consumers have a right to obtain access to the interstate common carrier of their choice and may contact their preferred common carrier for information on accessing that carrier's service using that telephone, and

- The name and address of the enforcement division of the FCC's Common Carrier Bureau.

Aggregators must also ensure that each of their phones presubscribed to a provider of operator services allows consumers to use 800 and 950 access code numbers to obtain access to their carriers of choice.

And an aggregator's charge to a consumer to place an 800 or 950 call may not be greater than what the aggregator charges for calls placed using the presubscribed operator service.

Even though aggregators may not block 800 or 950 numbers, they apparently may block other 1-0-XXX access calls, something that rules proposed by the FCC prior to passage of the act would not have allowed. This may help reduce instances of fraud.

The act is also less restrictive than the previously proposed rules in that only new, and not all, equipment will be required to have 1-0-XXX access capability.

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## The act is less restrictive than the rule previously proposed by the FCC.

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The FCC said it will consider the need to prescribe compensation (other than advance payment by consumers) for owners of competitive public pay telephones for calls routed to providers of operator services other than the presubscribed provider.

The FCC also said it will require the necessary actions or measures to ensure that aggregators are not exposed to undue risk of fraud.

Just how the new law will affect institutions that provide telephones to tenants of residence halls will depend on how the commission interprets the term "aggregator."

Section 226 of the act defines an aggregator as "any person that, in the ordinary course of its

*(Please continue on page 12)*





## PARTY LINE

*Ruth Michalecki  
Director of Telecommunications  
University of Nebraska*

Everyone is highly vulnerable to fraud, both in long distance networks and voice mail systems. The Oct. 29, 1990, issue of *Network World* had an interesting article on fraud. MCI led a session on network security at the Communications Managers Association meeting, also in October. Most of what they said makes a lot of sense.

Fraud has become a much larger issue over the past two or three years, because the carriers have been clamping down hard on calls made with stolen credit cards. Carriers such as AT&T, MCI and US Sprint can deactivate stolen cards within two hours, forcing the call-sell operators to look for new networks to tap.

Local telcos must pay for fraudulent calls if the calls were validated and set up by their PBXs, not the carrier switches. In fact, even Centrex users are vulnerable.

New York is the fraud capital of the world with 70 to 80 percent of all fraudulent calls originating from there, although the victims of call-sell operations, typically, are not located in New York.

The simplest form of PBX fraud involves the use of DISA (Direct Inward System Access). Company employees use DISA to dial into the PBX, usually via an 800-number, enter an access code and get an outside line. From there, they can place long-distance calls anywhere using the company's long-distance network.

Call-sell operators can do the same thing almost as easily as the legitimate employee. These thieves can get codes in any number of ways. One is "Dumpster Diving," rummaging through trash bins looking for call detail reports, discarded directories or discarded access code cards.

At times, they can con the PBX operator into giving them an access code or number of digits in the access codes by posing as a system administrator. One of the easier methods is simply to eavesdrop near a group of payphones in an airport or hotel lobby and copy down 800 numbers and access code/credit card numbers as they are vocalized. Once they have a good code, they will sell long distance calls to internationals who want to make a call "back home."

Over a three-day weekend, these call-sell thieves can gross any-

where from \$7,000 to \$10,000 in profits (tax free), and stick unsuspecting companies with phone bills in excess of \$25,000. According to MCI, some firms have suffered losses in excess of \$700,000 from fraudulent calling.

Stolen voice mail boxes are used to advertise the availability and sale price of a good credit-card number, calling-card number, etc. Drug dealers use this method of communicating because of the anonymity it provides.

We are all vulnerable – and we all need to become more vigilant. The quickest way to avoid fraud is to eliminate the DISA option. MCI suggests that companies impose service restrictions on outbound dialing, limiting the number of users (and facilities) that can make overseas calls. Be vigilant in checking call-detail records for irregular calling patterns, and make sure the hackers are not using a technique called PBX looping (using one PBX to place calls out through another switch in another state).

All three major carriers offer advice and assistance in dealing with fraud. Contact your carrier for further information on how to prevent this theft of services.

From "Short Takes" out of Cleveland, Ohio, come these few words of advice. Execs in 100 of the nation's 1,000 largest companies were asked which employee behavior disturbs them the most. The top complaints were:

Dishonesty and lying; irresponsibility, goofing off and doing personal business on company time; arrogance, ego problems and excessive aggressiveness; absenteeism and lateness; not following instructions or ignoring company policies; whining and complaining; absence of commitment, concern or dedication; laziness and lack of motivation.

Brother, am I in trouble! ☺

## Registration deadline for workshop is Feb. 18

Feb. 18 is the deadline to register for the ACUTA workshop – Understanding Telecommunications – to be taught in Manchester, NH, March 18-20. Rooms at the Holiday Inn, where the workshop will be held, are \$63 a night, plus tax. For room reservations, call (800) 465-4329. The seminar registration fee is \$150 for individuals representing member institutions and \$250 for non-members. The workshop will be held in Atlanta, GA, Oct. 23-25. For information or a registration form, contact: Lisa McLemore, ACUTA, Lexington Financial Center, Suite 2420, Lexington, KY 40507. Phone (606) 252-2882. ☺

# No one plans to fail, but some fail to plan

(Continued from page 1)

The key is to know your institution as well as you know telecommunications technology.

## Keep it Flexible

The information that we've compiled includes the iteration of plans or lists of potential goals and projects. The items may change, but a thread runs through each, the building of infrastructure that can support many projects or networks. *University* is a misnomer, I've come to believe. Our institutions should be called *Polyversities* for the diversity of goals and directions that they attempt to accomplish at one time with one pot of money.

You'll find that your users will change their concepts of what needs to be done as their departments change, as technology changes or as funding sources change. An early planning document for our institution reflects the data department's intellectual commitment (ideas, not dollars) to a broadband coaxial network. That commitment shifted to fiber, once fiber was in the ground and the computer vendor came out with fiber gear. Following a strategic view, we had determined a communications need, then installed ducts of sufficient size and number and chose a media that would meet other communication needs, not just those of data.

## Long-term Plan, Tactical Gains

Having a plan helps set a direction, but it's the smaller projects such as renovating a building or updating your toll network that provide funding for movement forward. Rare is the institution that will fund a grand design for communications in and of itself. More likely, the renovation of a building or the construction of a sewer drain line, rather than a visionary wish to create a grand network, will tie your buildings together.

## Avoid "One Trick Ponies"

I try to stay away from single-use cables or systems that will support only one application. In practice, that translates into specifying two-inch conduit when the user needs only one cable that will fit in 3/4 inch conduit. Chances are you'll be back there next year pulling in another cable. No one will remember that it was you who had the two-inch piece of infrastructure installed so it could carry additional cable. But you'll remember, and you'll feel good about it.

We do the same thing with fiber. We don't install the number of fiber pair needed for a specific project. We are more apt to put in 24 to 36 or more. The material is relatively inexpensive in contrast to the cost of labor, duct and conduit space.

The university environment will more likely have multiple rather than a single network. Having spare fiber or duct space provides for the needs of many applications. And, it can save money.

## Beware of "Vendor Solutions"

Some folks are tempted to do exactly what a vendor or consultant tells them. Challenging turn-key solutions may not make you popular with some of your users or the corporate reps, but it will cause vendors and consultants to dig deeper and look harder at what your institution needs. That will probably save money and/or improve service. And that will make you popular with those who count — your administration.

A key item to look for is adherence to standards, be it a wiring standard or a data or telephony standard. Standards tend to increase the number of suppliers. It's good to investigate and price competitive equipment for better cost or greater features. We tend to bid just about everything; our data compadres do not.

## Listen to Your Users

Getting out and talking with people, but I really mean *listening*, is the best way to discover your institution's needs. Often, folks will present "solutions" instead of stating a need. But there is usually more than one solution to a "need." I've had users tell me that they needed fiber cable when existing twisted-pair will more than meet their requirements. Meeting needs is what counts. And meeting needs cost effectively counts even more.

Listening also keeps you "plugged in" and aware of opportunities to make tactical gains. You'll also become a walking compendium of potential and present communications needs. Very quickly you can see whose needs overlap and whose needs are unique. You need to talk also. Let people know what you think and what you are doing. It helps to be known as someone who is getting things done and can be of assistance.

(Please turn to page 10)



Brenda Bell of Octel explains her firm's voice processing systems with the University of Cincinnati's Database Administrator, Barbara Roney, and Database Technician, Kayembe Ntumba, at the Winter Seminar.

# In-house call accounting has several benefits

In 1989, Brandeis University was looking, without success, for a satisfactory software package that would provide timely student billing and traffic reports.

"Our needs were quite specific," explains Virginia Baran Rude, Director of Telecommunications at the liberal arts institution. "Since we establish credit limits for students based on past-due status, it was important to identify our aged accounts receivable promptly. We needed a system that updated reports daily and gave us the option to stop usage in accordance to the limits we had set."

For three years, after the university installed its Northern Telecom SL-1 switch, Brandeis had relied on a service bureau for its bill processing.

"We found that providing data for the service bureau to figure statements required a great deal of our time," explains Baran Rude. "And the most up-to-date information we received from the service bureau was usually more than 30 days old. So, we decided to do it all in-house."

The solution came from Telco Research, which was referred to Brandeis by DEC, the maker of its mainframe computer. The Waltham, MA, institution became a beta test site for Telco's Student Resale Manager developed by Harold Sloss.

"The on-line monitoring provided by the Telco package is a major advantage for a university

telecommunications operations, Baran Rude points out. "It allows for timely detection of problems. And I also like having a clear delineation, based on different algorithms, between student and administrative costing," she adds.

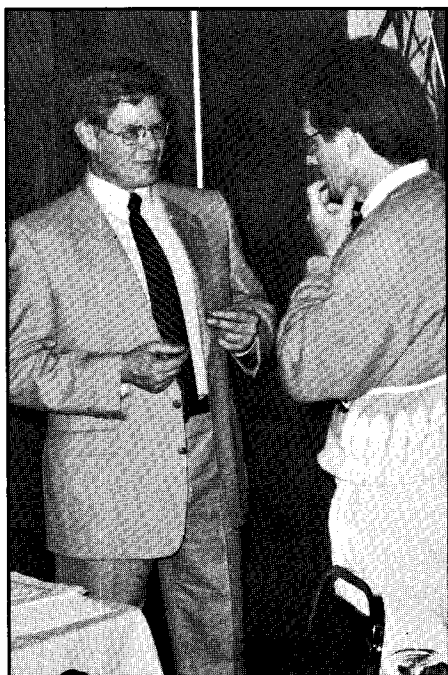
A current bill can now be produced on-demand, something which is especially helpful at the end of spring term when most students leave campus or anytime one of the 2,700 residential students withdraw from the university.

Billing disputes also can be settled relatively quickly. Past-due balances show up more promptly, and students are less likely to get so far behind that they cannot pay their bills at the end of a term.

"We do this all now much faster and less expensively than with our old service bureau," Baran Rude reports.

As opposed to a microcomputer-based system, a VAX-based mainframe system can handle a larger traffic volume, serve a larger student and administrative population, provide separate costing strategies for student and administrative personnel, and provide capability for integrating with other systems.

"We also can easily obtain traffic reports for analysis," she adds. "This is useful, because student long distance resale has more than doubled the long distance traffic originating from the university. And that qualifies us for better rates from carriers." ☺



Donald Van Doren (left), principal speaker for the ACUTA Winter Seminar on Voice Messaging/Voice Response in Ft. Lauderdale, discusses a point after one of his presentations with an attendee.

## Plan, and prevent failure

(Continued from page 9)

### Plugging in to the Institution

Keep abreast of what's happening on the financial and administrative side of your institution as well as what grants are flowing in. You may find opportunities to build infrastructure, be it with reconstruction of a building or to support the data communications needs of a research grant. A large part of our work now is finding opportunities where, by project dollars or by marginal cost contribution, we can expand and improve communication systems.

### A Planning Primer

This planning primer is probably not what you were looking for to help begin a strategic plan for your university. It's not about the "University of the Future," gigabyte networks, or high-definition video to everywhere. But I hope I helped bring you down to earth and focus on the day to day realities.

A grand vision does need to be part of a strategic plan. But at Yale, if we were to start talking about futuristic goals to the exclusion of nuts and bolts issues, we would quickly be out of step. We will get to be the "University of the Future," but only as the university as a whole is ready to become that institution. And, if we've done our job properly, the infrastructure will have already been put into place for those fantastic systems to function.

I don't often take the time to reflect the planning process. But if you have any questions about what I have written or just want to shoot the breeze about university telecom, just give me a call. My number is (203) 432-2001. I can be reached on BitNet at MEICKLE@YALEVM.

**(Editor's Note:** Strategic Applications of Telecommunications in Higher Education will be the topic of ACUTA's Spring Seminar, April 5-9, in Honolulu, Hawaii.) ☺



*Del Combs,  
Executive  
Director*

## From ACUTA Headquarters

As you probably have read from the front page of this newsletter, ACUTA had a smashing success of a winter seminar in Ft. Lauderdale last month.

At the conclusion of the event, a news release was sent to approximately 17 telecommunications periodicals. So scan the magazines, and be proud of your organization!

If an article does not appear in the periodical(s) to which you subscribe, please send their names and addresses to the ACUTA office in Lexington (ATTN: Bill Robinson), and we'll get them on our mailing list.

### **Observing Our Counterparts**

Recently, ACUTA President Bill Orrick and I attended a CHEMA (Council of Higher Education Management Associations) meeting in San Antonio. The purpose of CHEMA is for the exchange of information and ideas of the management and operation of associations in higher education, of which there are approximately 30.

As a follow-on to that meeting, I have requested by separate correspondence that each organization send information to me about what they provide to their membership and the means by which it is provided. The objective is to discover additional ways

to improve our membership services and to review our means of accomplishing this in comparison with other higher education association.

In the last several months, ACUTA has shared information with some CHEMA members regarding exhibit requirements and procedures, speaker selection methods, hotel selection and airline/car rental arrangements.

All of this information is useful in exploring the improvement of our services and to insure that associations, as well as their members, are getting the best possible value for the dollar.

I'm sure some of you belong to some of these other organizations such as CAUSE, NACUBO, APPA, etc. If you have any suggestions appropriate for ACUTA events based on your experience with some other organization, please drop us a line or give us a call. We'll see if it's possible for ACUTA to follow suit.

### **Voice Your Opinions, Questions**

I have asked Bill Robinson, our Publications Editor, to initiate a "letter to the editor" column in the ACUTA News. We want you to share your comments with other readers as well as provide a forum for you to ask questions that ACUTA members may assist in answering.

### **Seminar Rating**

Hot Off the Press! (That means Lisa McLemore, our Membership Services Coordinator, just handed something to me.) The overall rating of the Ft. Lauderdale seminar by attendees was 8.4, with 10 being the best possible rating. This is as high a rating as we've had for a seminar. Scottsdale in January 1990 also was rated 8.4.

That seems to say something about the Winter Seminars which began only in 1986.

Watch out! La Paloma Resort in Tucson. You're next, in January 1992.

### **Speaker Almost Scores a 10**

Donald Van Doren's knowledge of the subject received a nearly perfect 9.5. All other ratings, except for the hotel facilities, had ratings in the 8.4 neighborhood.

The biggest disappointment was the hotel rooms which received a rating of 5.1. The majority of the rooms, including the meeting hall and other public spaces had just completed a much-needed renovation. Unfortunately, the hotel's annex building – also the oldest structure in the complex – had not yet undergone renovation.

While some less than desirable conditions are expected due to the nature of ocean side property, there were several inexcusable conditions in a few rooms. This was brought to the attention of the hotel's general manager. Hopefully, the next group coming in will benefit from our critique.

However, these objectionable conditions did little to dampen the spirit of the attendees joining in for two and a half days of networking new ideas and discussing new applications of voice response and voice messaging technology. ♪

## **Deadline for Hawaii hotel deposit Feb. 19**

*(Continued from page 1)*

the Hawaii Seminar brochure mailed to members. Reservations will not be confirmed with credit cards or via telephone.

Deposits can be refunded if cancellation notice is received 72 hours prior to arrival date.

There is no charge for children under 19 years of age, if they occupy a room with a full-paying adult and utilize existing bedding. Three adults may occupy one room. There is a third person charge of \$20, however.

Hotel check-in time is after 3 p.m.. Check-out time is by 12 noon. ♪

# FCC yet to rule if colleges are aggregators

(Continued from page 7)

operations, makes telephones available to the public or to *transient* users of its premises, for interstate telephone calls using a provider of operator services."

As examples of aggregators, the law lists: hotels, hospitals and airports as well as "other providers of telephone business." Providers of operator services compete to win contracts to provide operator services to these aggregators, the law notes.

While the act does not specifically list colleges and universities as aggregators, application of the aggregator definition to colleges and universities will depend on how "transient" the FCC considers students who rent dormitory rooms for a school term or terms.

A demonstrated risk of fraud,

something which several college representatives have brought to the FCC's attention, might also prompt the commission to grant exemptions to educational institutions.

Aggregators who would have to make substantial purchases of equipment, such as a PBX, to fulfill the new requirements, apparently would be exempt until they replace their existing equipment.

Some ACUTA members have noted that they installed new equipment to offer improved services on the assumption that revenue from the resale of long distance services to students would help finance their purchases.

If they are required to give students access to any long distance common carrier, enough revenue could be lost, they fear, to jeopardize their budgets.

However, most resale packages that colleges offer to dormitory residents are more convenient and have rates that are competitive, if not more favorable, than those available to the public. More aggressive marketing by college telecom departments, therefore, may result in little lost revenue.

Many ACUTA members have received notices from their long distance carriers and operator service providers listing the new requirements for aggregators and advising college telecom departments to follow them.

At least one provider has notified a college to disregard its first advisory and promised to supply a new interpretation.

The FCC's notice of proposed rule making did not specifically address the situation of college and university phone systems. Comments on the proposed rules were accepted until January 22.

ACUTA President Bill Orrick filed comments on behalf of the associations' members with the

FCC in August. The commission says it will still consider those comments on the rules proposed prior to passage of the act in the rules it issues.

To contact the FCC, write Office of the Secretary, Federal Communications Commission, 1919 M St., NW, Washington, DC 20554.

## Positions Available

### Senior Technical Consultant Mass. Inst. of Technology

**Responsibilities:** Provide technical support to staff of Telecom, Info Systems groups and MIT community; prepare engineering studies; analyze, solve hardware, software and interface problems; keep current on new technology, recommend implementation; lead technical projects; develop documentation; prepare, present seminars; serve as resource for planning.

**Qualifications:** bachelor's degree, electrical engineering, computer science, telecommunications; five years technical experience; good interpersonal communication skills.

**Salary:** \$33,800-56,000

**For more information,** or to apply, contact: Morton Berlan, Director, Telecommunications Systems, Mass. Inst. of Technology, Room E19-738, 77 Mass. Ave., Cambridge, MA 02139. Phone (617) 253-3650.

### Director of Telecommunications Univ. of Texas Medical Branch

**Responsibilities:** Oversee replacement of voice, data and video systems and services - on-premise switching system and campuswide broadband network being installed with switchover to occur in mid-1991 - achieve operational stability of new system.

**Qualifications:** Current technical proficiency and procedural expertise, experience in developing systems and strategies for customer cultivation, strong leadership ability to instill confidence in telecom department.

**For more information,** or to apply, contact: Greg Barnes, 1110 Kingwood Drive, Suite 200, Kingwood, TX 77339. Phone (800)444-0573, (713) 359-6171.

## ACUTA welcomes new members

The following joined ACUTA between Dec. 13 and Jan. 21.

### Region 1 - Northeast U.S.

Michael Gnoutcheff, Jr., Bennington College

### Region 2 - Southeast U.S.

Pedro Bonilla-Torres, University of Puerto Rico  
Jimmy Green, Jacksonville State Univ.  
Jim Isom, Design Systems, Inc.

### Region 3 - Midwestern U.S.

David Beckett, Refurbo Communications, Inc.  
Carolyn Parnell, University of Minnesota  
Annette Roos, Waukesha County Tech. College  
Marion Tucker, Northern Oklahoma College  
Ronald Zunker, Waukesha County Tech. College

### Region 4 - Western U.S.

Scott Bradley, Utah State Univ.  
Carl Dury, Whittier College